

CLAIMS

1. An self-enhancing search system comprising:
 - a semantic taxonomy containing semantic nodes in a hierarchical structure;
 - a search system analyzer that periodically looks through a document and identifies a semantic node term in the semantic taxonomy applicable to the document;
 - a semantic binder attaching the document to the semantic node term; and
 - relevant document finder based on enhanced queries including the semantic node term to locate documents applicable to a user's search.
2. The search system of claim 1, wherein the enhanced search query includes "the user's search query" OR "the semantic node" ..
3. The search system of claim 2 including a semantic dictionary which defines user query terms in accordance with the semantic nodes in the semantic dictionary.
4. The search system of claim 3 including a semantic dictionary builder which examines the system log to increase the terms in the semantic dictionary.
- 15 5. The search system of claim 4 including ranking the results of searches using the enhanced queries.
6. The search system of claim 5, including a text analyzer comprising:
 - a sub-module that identifies domain specific terms in a given query, using domain specific glossary;
 - 20 a sub-module that finds synonyms and related terms for the identified terms, using domain specific thesaurus;
 - a sub-module that finds other statistically close terms; and
 - a sub-module that identifies relevant domain specific categories for the identified terms, using domain specific ontology.

7. The search system of claim 6, wherein the dictionary builder includes:
 - a sub-module that binds queries in the identified semantic taxonomy categories, using the results of the text analyzer.
8. The search system of claim 7, wherein the semantic binder includes:
 - 5 a sub-module that adds new doc-query links to the meta-data of the corresponding textual index entries to link the documents to the semantic taxonomy categories.
9. Self-enhancing search program on a computer usable medium comprising:
 - semantic taxonomy code containing semantic nodes in a hierarchical structure;
 - search system analyzer code that periodically looks through a document and identifies a
 - 10 semantic node term in the semantic taxonomy applicable to the document;
 - semantic binder code attaching the document to the semantic node term; and
 - relevant document finder based on enhanced queries including the semantic node term to locate documents applicable to a user's search.
10. The search program of claim 9, wherein the enhanced search query includes "the user's
- 15 search query" OR "the semantic node" ..
11. The search program of claim 10 including code for a semantic dictionary which defines user query terms in accordance with the semantic nodes in the semantic dictionary.
12. The search system program of claim 11 including code for a semantic dictionary builder which examines the system log to increase the terms in the semantic dictionary.
- 20 13. The search system program of claim 12 including code for ranking the results of searches using the enhanced queries.

14. The search system program of claim 13, including a text analyzer comprising:
code for a sub-module that identifies domain specific terms in a given query, using domain
specific glossary;
code for a sub-module that finds synonyms and related terms for the identified terms,
5 using domain specific thesaurus;
code for a sub-module that finds other statistically close terms; and
code for a sub-module that identifies relevant domain specific categories for the identified
terms, using domain specific ontology.

15. The search system program of claim 14, wherein the dictionary builder includes a
10 sub-module that binds queries in the identified semantic taxonomy categories, using the original
results of the text analyzer.

16. The search system program of claim 15, wherein a semantic binder including the module
comprises:
15 a sub-module that adds new doc-query links to the meta-data of the textual index entries
to link the documents to the semantic taxonomy categories.